

Listing of Claims:

1. (Previously Presented) A process for continuously recovering waste paint comprising:
feeding a booth-circulating water containing paint particles discharged from a paint booth to a first separation tank, and adding a dispersing agent and a floatation agent into the first separation tank to finely divide and disperse the paint particles for floating to form a liquid containing the paint particles;

feeding said liquid containing the paint particles into a second separation tank to roughly separate a first liquid containing paint flocculate and a second liquid containing no paint flocculate by flocculating the paint particles to form the paint flocculate;

transferring the first liquid containing paint flocculate having been roughly separated in the second separation tank to a foreign-matter separation tank for removal of foreign matter contained in the first liquid containing paint flocculate by retaining the liquid in the foreign-matter separation tank; and

separating the paint flocculate from the first liquid containing paint flocculate having been subjected to the removal of foreign matter to collect the paint flocculate.

2. (Previously Presented) The process for continuously recovering waste paint as defined in claim 1, further comprising separating the first liquid containing the paint flocculate from the second liquid containing no paint flocculate by floating up the paint particles obtained from the first separation tank under application of pressure.

3. (Previously Presented) The process for continuously recovering waste paint as defined in claim 1, further comprising removing the foreign matter being carried out by stirring the first liquid containing paint flocculate in the foreign-matter separation tank to remove the foreign-matter floated on a surface of the first liquid.

4. (Previously Presented) The process for continuously recovering waste paint as defined in claim 1, wherein the separation of the paint flocculate from the first liquid containing paint flocculate is carried out by centrifugation.

5.-6. (Cancelled)

7. (Previously Presented) A process for continuously recovering waste paint comprising:

feeding a dispersing agent and a floatation agent to a first liquid containing paint particles to disperse and float said paint particles;

separating a second liquid containing said paint particles floating in said first liquid;

removing a third liquid containing more paint particles than a remaining liquid;

removing foreign matter from said third liquid; and

extracting said paint particles from said third liquid after removing said foreign matter.

8. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein said dispersing agent serves to finely divide said paint particles and render said paint particles non-sticky

9. (Previously Presented) The process for continuously recovering waste paint according to claim 8,

wherein said dispersing agent renders said paint particles non-sticky by a hydroxide or oxide absorbing to a surface of said paint particles.

10. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein said floatation agent has no deflocculating property.

11. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein said floatation agent comprises a polymer and serves to flocculate said paint particles by crosslinking function of said polymer.

12. (Previously Presented) The process for continuously recovering waste paint according to claim 7,
further comprising:

neutralizing a surface of said paint particles before feeding said dispersing agent.

13. (Previously Presented) The process for continuously recovering waste paint according to claim 12,

wherein said neutralizing is carried out using an inorganic flocking agent.

14. (Previously Presented) The process for continuously recovering waste paint according to claim 13,

wherein said inorganic flocking agent is an aluminum hydroxide.

15. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein separating said second liquid is carried out by pumping an upper layer of said first liquid.

16. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein separating of said second liquid is carried out in a first separation tank, said first separation tank comprises:

a receiving tank; and

a taking-out tank;

wherein said paint particles float in said receiving tank and overflow to said taking-out tank.

17. (Previously Presented) The process for continuously recovering waste paint according to claim 16,

wherein said paint particles overflowed to said taking-out tank are accumulated in an accumulating pit.

18. (Previously Presented) The process for continuously recovering waste paint according to claim 17,

wherein said paint particles overflowed to said taking-out tank are accumulated together with cleaning water in said accumulating pit.

19. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein removing said third liquid is carried out in a second separation tank by taking out an upper layer of said second liquid in said second separation tank.

20. (Previously Presented) The process for continuously recovering waste paint according to claim 19,

wherein said paint particles in said third liquid are flocculated to form paint flocculates having a particle size between 0.1mm and 1mm.

21. (Previously Presented) The process for continuously recovering waste paint according to claim 19,

wherein said paint particles in said second separation tank are floated up by application of pressure.

22. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein removing said foreign matter is carried out in a foreign-matter separation tank by scraping a surface area of said third liquid in said foreign-matter separation tank.

23. (Previously Presented) The process for continuously recovering waste paint according to claim 22,

wherein said foreign-matter separation tank includes a stirrer to stir said third liquid.

24. (Previously Presented) The process for continuously recovering waste paint according to claim 7,

wherein extracting said paint particles is carried out by a centrifugal separator.

25. (Previously Presented) The process for continuously recovering waste paint according to claim 16,

wherein said first liquid is a booth-circulating water from a liquid feeding gutter inside a painting booth, and

said booth-circulating water in said receiving tank is fed to said liquid feeding gutter.

26. (Previously Presented) The process for continuously recovering waste paint according to claim 16,

wherein removing said third liquid is carried out in a second separation tank by taking out an upper layer of said second liquid in said second separation tank, and

a lower layer in said second separation tank is fed into said taking-out tank.

27. (Previously Presented) The process for continuously recovering waste paint according to claim 16,

wherein extracting said paint particles is carried out by a centrifugal separator, and a liquid part after extracting said paint particles is fed into said taking-out tank.